

CLAIMS

1. A computer-implemented method for reverting a process in an in-line instrumented state to an uninstrumented state, said method
- 5 comprising:
- modifying selected text segment portions from said process;
  - unmapping instrumented code space such that said instrumented code space is inaccessible to said process;
  - provided an instruction pointer resides in said instrumented code

10 space, updating said instruction pointer to uninstrumented code space; and

  - executing said process and, provided said process generates a fault by seeking to access an address in instrumented code space, providing a corresponding address in said uninstrumented code space.
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2. The computer-implemented method for reverting a process in an in-line instrumented state to an uninstrumented state as recited in Claim 1 wherein said selected text segment portions are selected from the group consisting of: breakpoints, branches, switch tables, procedure lookup
- 20 tables (PLTs) for said instrumented code space.
3. The computer-implemented method for reverting a process in an in-line instrumented state to an uninstrumented state as recited in Claim 1 wherein said instrumented code space is comprised of shared memory.
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4. The computer-implemented method for reverting a process in an in-line instrumented state to an uninstrumented state as recited in Claim 1 further comprising:
- unwinding a call stack of said process and recording return

30 addresses of said process.
5. The computer-implemented method for reverting a process in an in-line instrumented state to an uninstrumented state as recited in Claim 4 further comprising:
- 35 comparing said return addresses of said process to said address in said instrumented code space which generated said fault upon execution of said process.
6. A computer-readable medium embodying instructions that

cause a computer to perform a method for reverting a process in an in-line instrumented state to an uninstrumented state, the method comprising:

- 5       modifying selected text segment portions from said process;
- unmapping instrumented code space such that said instrumented code space is inaccessible to said process;
- provided an instruction pointer resides in said instrumented code space, updating said instruction pointer to uninstrumented code space; and
- 10       executing said process and, provided said process generates a fault by seeking to access an address in instrumented code space, providing a corresponding address in said uninstrumented code space.

- 7. The computer-readable medium of Claim 6 wherein said selected
- 15       text segment portions are selected from the group consisting of: breakpoints, branches, switch tables, procedure lookup tables (PLTs) for said instrumented code space.

- 8. The computer-readable medium of Claim 6 wherein said
- 20       instrumented code space is comprised of shared memory.

- 9. The computer-readable medium of Claim 6 wherein said
- instructions further cause said computer to:
- unwind a call stack of said process and record return addresses of
- 25       said process.

- 10. The computer-readable medium of Claim 9 wherein said
- instructions further cause said computer to:
- compare said return addresses of said process to said address in
- 30       said instrumented code space which generated said fault upon execution of said process.

- 11. An apparatus for reverting a process in an in-line
- instrumented state to an uninstrumented state, the apparatus
- 35       comprising:

      means for modifying selected text segment portions from said process;

      means for unmapping instrumented code space such that said instrumented code space is inaccessible to said process;

means for updating an instruction pointer to uninstrumented code space provided said instruction pointer resides in said instrumented code space, and

- 5 means for executing said process and, provided said process generates a fault by seeking to access an address in instrumented code space, providing a corresponding address in said uninstrumented code space.

- 10 12. The apparatus of Claim 11 wherein said selected text segment portions are selected from the group consisting of: breakpoints, branches, switch tables, procedure lookup tables (PLTs) for said instrumented code space.

- 15 13. The apparatus of Claim 11 wherein said instrumented code space is comprised of shared memory.

- 20 14. The apparatus of Claim 11 further comprising:  
means for unwinding a call stack of said process and recording return addresses of said process.

15. The apparatus of Claim 14 further comprising:  
means for comparing said return addresses of said process to said address in said instrumented code space which generated said fault upon execution of said process.